

## DATA PAPER

## Article Processing Charges Paid by 25 UK Universities in 2014

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This dataset contains details of 6,943 article processing charges (APCs) paid by 25 higher education institutions in the UK during 2014. The data was collected as part of Jisc Collections' APC data collection project and has been released with permission from the institutions who provided the data. The data has been aggregated, normalized, and archived as a single CSV file. It will be of interest to those seeking to understand the scale of open access payments within the UK, and could be reused by combining it with subscription and APC expenditure data from other sources.

**Keywords:** library services; research publications; research outputs; data

**Funding statement:** This dataset was created as part of the author's employment at Jisc Collections.

**(1) Overview****Context**

Article processing charges (APCs) are fees which are sometimes paid in order to make a research article, or other research output, open access. In the UK many institutions now spend significant amounts on APCs, particularly in light of the policies of RCUK and the Wellcome Trust which make specific funds available to pay APCs [1, 2]. The fact that institutions now pay fees for both subscription journals and APCs to the same publishers is a cause for concern for both institutions and policy makers [3]. Jisc Collections, as the body which negotiates journal subscription deals on behalf of UK academic libraries, now includes both subscription and APC expenditure in its negotiations. The data presented here was gathered in order to inform these negotiations.

**(2) Methods****Steps**

Following the sampling strategy outlined below, all institutions were contacted by email and asked to provide data. Some institutions used Jisc's recommended template spreadsheet [4]. For those that did not, their data was converted to fit this template by mapping corresponding fields. Files for individual institutions are also available [5]. Data was then compiled into a single CSV file with an additional column named 'Institution' to identify the source and normalized as outlined below.

**Sampling strategy**

In 2014, 23 institutions had provided APC data to Jisc Collections covering payments made in 2013. The same institutions were asked to repeat the exercise in 2015

for payments made in 2014. 22 of those institutions (listed under 'Dataset creators') agreed to participate and release their data openly. One institution agreed to provide data but not to release it openly. Three further institutions (Plymouth University, Durham University, and Loughborough University) were also asked to provide data in order to increase the size of the dataset. They were chosen because they were in receipt of an RCUK block grant but are in Jisc bands 4 and 5 [6], which were underrepresented in the original sample.

**Quality Control**

Data was normalized by standardizing the data for easy comprehension. For example, converting all date formatting to DD/MM/YYYY where known; standardizing abbreviations and punctuation; and using only one variation of a publisher or journal name e.g. *PLOS* rather than *Public Library of Science*. The number of entries in the fields 'ISSN' and 'Type of publication' was increased by copying data across, e.g. if one entry for *PLOS Genetics* had the ISSN listed as 1553-7390 then the rest would also.

**(3) Dataset description****Object name**

APCs-2014-combined.

**Format names and versions**

CSV.

**Creation dates**

2015-01-20 to 2015-03-24.

**Dataset Creators****Author**

Stuart Lawson, Research Analyst, Jisc Collections – Designed the data collection and template, collected data, aggregated and cleaned data, authored the paper.

**Data contributors**

Bangor University, University of Bath, University of Birmingham, University of Bristol, University of Cambridge, Cranfield University, Durham University, University of Glasgow, Imperial College London, Lancaster University, University of Leicester, University of Liverpool, Loughborough University, LSHTM, Newcastle University, Plymouth University, University of Portsmouth, Queen Mary University of London, Royal Holloway University of London, University of Salford, University of Sheffield, University of Sussex, Swansea University, UCL, University of Warwick.

**Language**

N/A.

**License**

CC0.

**Repository name**

Figshare.

**Repository location**

<http://figshare.com/>

<http://dx.doi.org/10.6084/m9.figshare.1305596>

**Publication date**

2015-02-11.

**(4) Reuse potential**

This data could be reused by combining it with APC expenditure data from other sources. The author is not aware of any comparable data being available from outside the EU. While some data is available from German institutions [7], the UK currently has the largest quantity available with over 40 UK higher education institutions, along with the Wellcome Trust, having now published at least some level of detail about their APC expenditure during 2013 and/or 2014 [5]. If this dataset is combined with others there may well be duplicate entries so this would need to be taken into consideration. Over time, it can be used as a benchmark against which to evaluate APC expenditure in future years as that data becomes available.

Information about the level of expenditure on journal subscriptions with some publishers is also available for the UK, so this can be combined to see the total subscription and APC expenditure levels that some institutions have with some publishers [8]. The level of APC expenditure compared to subscription expenditure is growing – up to 30% in some cases [9] – so this is an important area of continuing research if research funders and institutions are to monitor where their funds are going. Jisc Collections will repeat the data collection exercise each year for at least the next three years.

It is likely that extensive validation work on the dataset, such as checking that the information contained is correct, would lead to a number of alterations and corrections. For many of the fields it would only be possible for the institution or research funder to validate, but the bibliographic information could be made more accurate by using data from other sources. Due to time restraints, data was only normalized to be internally consistent and was not verified by checking primary sources. Therefore cross-checking it with sources such as CrossRef would lead to greater accuracy of the bibliographic fields.

Further analysis could reveal information about the extent of payments made to particular publishers and the average APC price paid to different publishers. It would also be possible to highlight relationships between individual research funders and publishers, by seeing which publishers receive money from any given funder.

**Competing Interests**

SL was in paid employment by Jisc Collections as part of the data acquisition for this study.


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**How to cite this article:** Lawson, S 2015 Article Processing Charges Paid by 25 UK Universities in 2014. *Journal of Open Humanities Data* 1:e2, DOI: <http://dx.doi.org/10.5334/johd.2>

**Published:** 29 September 2015

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 *Journal of Open Humanities Data* is a peer-reviewed open access journal published by Ubiquity Press

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